

1. PURPOSE. This change transmits revised pages to Chapter 4, Air Traffic Control, and Appendix 2, Summary of Establishment and Discontinuance Criteria.

2. EXPLANATION OF CHANGE. This change provides establishment and discontinuance criteria for Airport Surface Detection Equipment (ASDE) III. The basis of the proposed criteria is a life-cycle benefit-cost analysis outlined in Report Number FAA-APO-93-12, "Establishment Criteria for Airport Surface Detection Equipment (ASDE) III." Copies of this report are available from APO-220.

3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

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		15 and 16	4/29/91

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A-X(AF/AS/AT/FS/PL)-3; A-FAF-2/3(LTD);  
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- (a) There are five or more IFR peak day flights exchanged.
- (b) Air/ground communication coverage exists along the entire route(s) at the altitude(s) involved by either direct means from the tower en route control facilities or by relay through an FSS or company radio.
- (c) Landlines exist between the tower en route control facilities.
- (d) Sufficiently trained personnel are available to assume the tower en route control function.

(2) Additional communications and/or landlines required to provide tower en route control service may be requested when the volume of IFR peak day traffic exchanged between the approach control facilities exceeds 25 flights.

b. Discontinuance. Tower en route service provided within existing resources as outlined in paragraph 43a(1) may be continued as long as an operational benefit results. When the volume of IFR peak day traffic exchanged between the approach control facilities is less than 10 flights, the additional communications equipment and/or landings provided under paragraph 43a(2) are candidates for decommissioning.

#### 44. AIRPORT SURFACE DETECTION EQUIPMENT (ASDE).

\* a. Establishment. An FAA towered airport qualifies as an establishment candidate for ASDE:

(1) if the present value of incremental life-cycle benefits exceeds the present value of incremental life-cycle costs, using the benefit-cost methodology outlined in Report Number FAA-APO-93-12, "Establishment Criteria for Airport Surface Detection Equipment (ASDE) III"; or

(2) for those locations which do not qualify under paragraph 44a (1), the location may still qualify for an ASDE if the Administrator determines that an aeronautical requirement exists due to operational or safety factors, such as runway configuration, military operations, historical record of high incidence of runway incursions, frequent and predictable occurrence of severe climatological phenomena such as heavy snow, ice, fog, or other local conditions that can adversely affect aircraft operations or the safety of the flying public. \*

45. AUTOMATIC TERMINAL INFORMATION SERVICE (ATIS).

a. Establishment. An FAA tower airport is a candidate for ATIS if it is a Level II or higher level facility, or records 50,000 or more annual itinerant operations.

NOTE: The Office of Associate Administrator for Air Traffic maintains a current list of facility levels for each tower which is determined by a traffic density measure defined in the air traffic control series positions classification standard.

b. Continued Service. ATIS service may continue to be provided at an air traffic control tower regardless of activity if such service facilitates operational safety or efficiency. ATIS will be automatically discontinued if associated air traffic control services are discontinued.

46. AUTOMATED WEATHER OBSERVING SYSTEM (AWOS) AND AUTOMATED SURFACE OBSERVING SYSTEM (ASOS).

a. FAA Towered Airports. All FAA towered airports where the surface weather observation function is the responsibility of the FAA qualify for AWOS/ASOS establishment, except those locations identified as tower discontinuance candidates under the provisions of paragraph 40. Priority of AWOS/ASOS establishment will be given to part-time facilities, followed by full-time facilities, in recognition of the relatively greater benefits of AWOS/ASOS when facilities are closed. Criteria for the establishment and discontinuance of AWOS/ASOS at non-Federal towered airports and locations identified as tower discontinuance candidates are outlined in paragraph 46c.

ASOS will be the system employed at the great majority of FAA towers where FAA has the responsibility for the surface aviation observation.

b. Flight Service Stations. Where an automated flight service station is obligated to take weather observations, that location qualifies for AWOS establishment. Other locations with flight service stations qualify if they satisfy either the provisions of paragraphs 46a or 46c. ASOS may also be employed at flight service stations.

c. Non-Towered and Non-Federal Towered Airports. Establishment and discontinuance criteria for AWOS/ASOS at non-towered and non-Federal towered airports are two-phased. Phase I criteria are simple, generalized criteria designed to identify potential candidates initially. Under Phase I a ratio value is computed by summing the benefits provided to each user class and dividing the sum by the life-cycle cost. If the ratio value obtained

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**FIGURE 3. SUMMARY OF ESTABLISHMENT AND DISCONTINUANCE CRITERIA  
FOR CHAPTER 4, AIR TRAFFIC CONTROL**

Facility or Service	Establishment	Discontinuance	Additional Facility or Improvement
* Airport Traffic Control Tower, Paragraph 40.	Benefit/cost ratio greater than or equal to one.	Benefit/cost ratio less than one.	
Approach Control Service Paragraph 41.	<u>Tower Airports</u> Within existing tower resources, or ILS or 5,000 or more annual instrument operations.	<u>None</u> , if established within existing resources. 3,500 or less annual instrument operations and less than 1,095 passenger originations.	
		<u>Non-Towered Airports</u> Within existing resources, or 1,500 or more annual instrument operations or 1,825 passenger originations.	<u>None</u> , if established within existing resources. 1,000 or less annual instrument operations and less than 1,095 passenger originations.

**FIGURE 3. SUMMARY OF ESTABLISHMENT AND DISCONTINUANCE CRITERIA  
FOR CHAPTER 4, AIR TRAFFIC CONTROL CONTINUED**

Facility or Service	Establishment	Discontinuance	Addi Faci Impr
Combined Station/ Tower (CS/T), Paragraph 42.	FAA tower airport with requirement for 24-hour staffed air/ground en route communications.	En route air/ground communications coverage no longer required, or may be provided remotely from adjacent FSS.	
Tower En Route Control, Paragraph 43.	When within existing resources and 5 or more annual IFR peak day flights exchanged, or 25 or more annual IFR peak day flights exchanged at locations requiring additional landlines or communications.	None at locations when within existing resources and 10 or less annual IFR peak day flights at locations requiring additional resources.	
* Airport Surface Detection Equipment (ASDE), Paragraph 44.	Benefit/cost ratio is greater than or equal to one, or, if the benefit/cost ratio is less than one, the Administrator determines that an aeronautical requirement exists due to operational or safety factors such as runway configuration, military operations, historical record of a high incidence of runway incursions, or frequent and predictable severe climatological phenomena.	Benefit/cost ratio is less than one or a previously identified aeronautical requirement no longer exists.	

FIGURE 3. SUMMARY OF ESTABLISHMENT AND DISCONTINUANCE CRITERIA  
FOR CHAPTER 4. AIR TRAFFIC CONTROL CONTINUED

Facility or Service	Establishment	Discontinuance	Additional Improvement
Automatic Terminal Information Service (ATIS), Paragraph 45.	FAA tower airport which is Level II or higher or records at least 50,000 annual itinerant ops.	None-except discontinued when air traffic control services discontinued.	

**FIGURE 3. SUMMARY OF ESTABLISHMENT AND DISCONTINUANCE CRITERIA  
FOR CHAPTER 4, AIR TRAFFIC CONTROL (CONTINUED)**

Facility or Service	Establishment	Discontinuance	Addit or Im p
Automated Weather Observing System and Automated Surface Observing System at FAA towered airport, Par. 46a.	Automatically qualifies if FAA is responsible for the weather observation function. Priority given to FAA ATCT's with part-time operating hours, followed by full-time FAA ATCT's.	If tower is decommissioned and location meets AWOS/ASOS discontinuance criteria for non-towered airport.	
Automated Weather Observing System and Automated Surface Observing System at automated flight service station, Par. 46b.	Automatically qualifies if facility is obligated to take weather observations.	If automated flight service station is decommissioned and location meets discontinuance criteria for non-towered airport.	
Automated Weather Observing System and Automated Surface Observing System at non-Federal towered, or ATCT discontinuance candidate airport, Par. 46c.	Ratio value of 1.0 or greater.	Ratio value of less than 0.45.	

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**FIGURE 3. SUMMARY OF ESTABLISHMENT AND DISCONTINUANCE CRITERIA  
FOR CHAPTER 4, AIR TRAFFIC CONTROL (CONTINUED)**

Facility or Service	Establishment	Discontinuance	Additional Facility or Improvement
Low-Level Windshear Alert System, Paragraph 48	Net present value of zero or greater and does not also qualify under paragraphs 49, 50, or 51. If more than one system meets the criteria, then the one with the highest (positive) net present value is the qualifying system.	None	None
Terminal Doppler Weather Radar, Paragraph 49.	Net present value of zero or greater and does not also qualify under paragraph 48, 49, or 51. If more than one system meets the criteria, then the one with the highest (positive) net present value is the qualifying system.	None	None

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**FIGURE 3. SUMMARY OF ESTABLISHMENT AND DISCONTINUANCE CRITERIA  
FOR CHAPTER 4, AIR TRAFFIC CONTROL (CONTINUED)**

Facility or Service	Establishment	Discontinuance	Additional Facility or Improvement
Airport Surveillance Radar Modification for Windshear, Paragraph 50.	Net present value of zero or greater and does not also qualify under paragraphs 48, 49, or 51. If more than one system meets the criteria, then the one with the highest (positive) net present value is the qualifying system.	None	None
Integrated Windshear Detection Systems, Paragraph 51.	Net present value of zero or greater and does not also qualify under paragraph 48, 49, or 50. If more than one system meets the criteria, then the one with the highest (positive) net present value is the qualifying system.	None	None